

Date: Monday, 27/10/2008 2:16:20 PM  
 User: Julie Dawson

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206/OH-58 SADDLE, INBOARD, LEFT SIDE
Job Number	: 42978		
Estimate Number	: 10833		
P.O. Number	:	Part Number	: D29331
This Issue	: 27/10/2008 S.O. No. :	Drawing Number	: D2933 REV C
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: // Type : MACHINED PARTS	Drawing Revision	: C
Previous Run	: 41713	Material	:
Written By	:	Due Date	: 12/11/2008
Checked & Approved By	: <u>JLD 08.10.28</u>	Qty:	8 Um: Each
Comment	: Est: B00.06.26 New DWG rev (mpp 2069) EC Est Rev:C As per Rev C 07-03-19 JLM		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D6101001	Saddle Billet
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 6.0000 Each(s)

Issue material from stock: 7075-T7351 QQ-A-250/12

Cut Size 2.0 x 6.25 X 6.00

Grain Along Long 6.00 Length

Batch No: B34872 (x7) B34201 (x3) mmt 08/11/09 (10)

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

Program part number and batch number.

1-Inspect part number and batch number are programmed correctly.

2-Machine Step No 1 of Folio and visually inspect as per dwg D2933 & attached Dimension Sheet

3-Machine Step No 2 of Folio and visually inspect as per dwg D2933 & attached Dimension Sheet

4-Machine Step No 3 of Folio and visually inspect as per dwg D2933 & attached Dimension Sheet

5-Deburr

mmt 08/11/09 (10)

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE

Machine Keyway and inspect per attached dimension sheet

mmt 08/11/09 (10)

4.0	QC1	INSPECT ALL DIM TO DIM SHEET
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Comment: INSPECT ALL DIM TO DIM SHEET

mmt 08/11/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Monday, 27/10/2008 2:16:20 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206/OH-58 SADDLE, INBOARD, LEFT SIDE

Job Number: 42978

Part Number: D29331

Job Number:



Seq. #: Machine Or Operation: Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

28 08/11/11

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

M-1 08/11/11

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

7:50  
320 OF  
8:20

M-1 08/11/12

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

08-11-12

210

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 428

8/11/13

10X  
50

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/11/14

Job Completion



MF 08-11-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>				<b>Work Order:</b> 42978	
<b>Description:</b> 206 Saddle, Inboard, Left side				<b>Part Number:</b> D2933-1	
<b>Inspection Dwg:</b> D2933 <b>Rev:</b> C <b>DSK:</b> <b>Rev:</b>				<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
A	0.100	0.140		.119	.116	.119	.120	.117
B	0.100	0.140		.118	.113	.115	.114	.118
C	0.100	0.140		.130	.130	.122	.132	.130
D	0.210	0.230		.220	.221	.218	.217	.218
E	1.245	1.255		1.248	1.248	1.249	1.248	1.248
F	1.245	1.255		1.248	1.248	1.249	1.248	1.248
G	2.495	2.505		2.499	2.499	2.498	2.499	2.499
H	0.510	0.515		.511	.571	.570	.570	.570
I	1.572	1.582		1.578	1.577	1.577	1.577	1.577
J	2.495	2.505		2.498	2.498	2.490	2.500	2.500
K	0.257	0.262		.259	.260	.260	.260	.260
L	0.312	0.317		.314	.314	.314	.314	.314
M	0.235	0.240		.240	.240	.240	.240	.240
N	0.100	0.140		.110	.110	.110	.109	.109
O	0.540	0.560		.550	.550	.545	.545	.546
P	0.490	0.510		.503	.502	.501	.504	.503
Q	3.715	3.725		3.718	3.718	3.720	3.720	3.722
R	2.470	2.510		2.492	2.492	2.497	2.497	2.494
S	0.240	0.270		.255	.252	.254	.252	.252
T	0.100	0.180		.135	.127	.130	.128	.140
U	1.625	1.635		1.629	1.629	1.629	1.629	1.629
V	1.362	1.372		1.366	1.368	1.368	1.368	1.367
W	0.316	0.321		.320	.320	.320	.320	.320
X	1.125	1.145		1.132	1.132	1.133	1.132	1.132
Y	1.565	1.585		1.573	1.573	1.573	1.573	1.573
Z	0.178	0.198		.188	.188	.188	.188	.188
AA								
AB								
AC								
AD								
AE								
Accept/Reject								

<b>Measured by:</b> mms- 12/2	<b>Date:</b> 08/11/09
<b>Audited by:</b> 88	<b>Date:</b> 08/11/11
<b>Prototype Approval:</b> N/A	<b>Date:</b> N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	

<b>DART AEROSPACE LTD</b>				<b>Work Order:</b> 42978	
<b>Description:</b> 206 Saddle, Inboard, Left side				<b>Part Number:</b> D2933-1	
<b>Inspection Dwg:</b> D2933 <b>Rev:</b> C <b>DSK:</b> <b>Rev:</b>				<b>Page 1 of 1</b>	

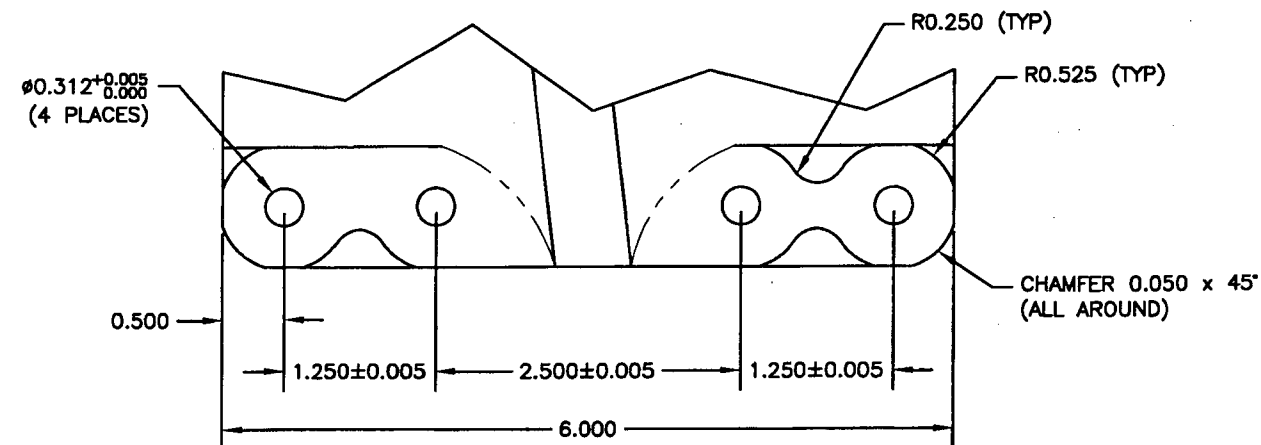
### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ **First Article**
☐ **Prototype**

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1 6	2 7	3 8	4 9	5 10
A	0.100	0.140		.118	.118	.112	.112	.122
B	0.100	0.140		.120	.117	.112	.112	.122
C	0.100	0.140		.130	.130	.129	.129	.130
D	0.210	0.230		.219	.217	.217	.216	.216
E	1.245	1.255		1.248	1.248	1.250	1.250	1.250
F	1.245	1.255		1.248	1.248	1.250	1.250	1.250
G	2.495	2.505		2.500	2.498	2.500	2.500	2.500
H	0.510	0.515		.510	.510	.510	.510	.510
I	1.572	1.582		1.577	1.577	1.577	1.577	1.577
J	2.495	2.505		2.499	2.501	2.500	2.500	2.500
K	0.257	0.262		.260	.260	.260	.260	.260
L	0.312	0.317		.314	.314	.315	.315	.315
M	0.235	0.240		.240	.240	.240	.240	.238
N	0.100	0.140		.110	.107	.109	.109	.109
O	0.540	0.560		.548	.546	.544	.544	.543
P	0.490	0.510		.506	.506	.503	.503	.502
Q	3.715	3.725		3.718	3.718	3.719	3.719	3.719
R	2.470	2.510		2.494	2.496	2.495	2.495	2.495
S	0.240	0.270		.254	.252	.250	.251	.248
T	0.100	0.180		.133	.137	.135	.135	.135
U	1.625	1.635		1.632	1.631	1.630	1.630	1.630
V	1.362	1.372		1.367	1.367	1.366	1.366	1.366
W	0.316	0.321		.321	.320	.320	.320	.319
X	1.125	1.145		1.131	1.131	1.133	1.131	1.133
Y	1.565	1.585		1.576	1.575	1.575	1.572	1.574
Z	0.178	0.198		.188	.188	.188	.188	.188
AA								
AB								
AC								
AD								
AE								
Accept/Reject								

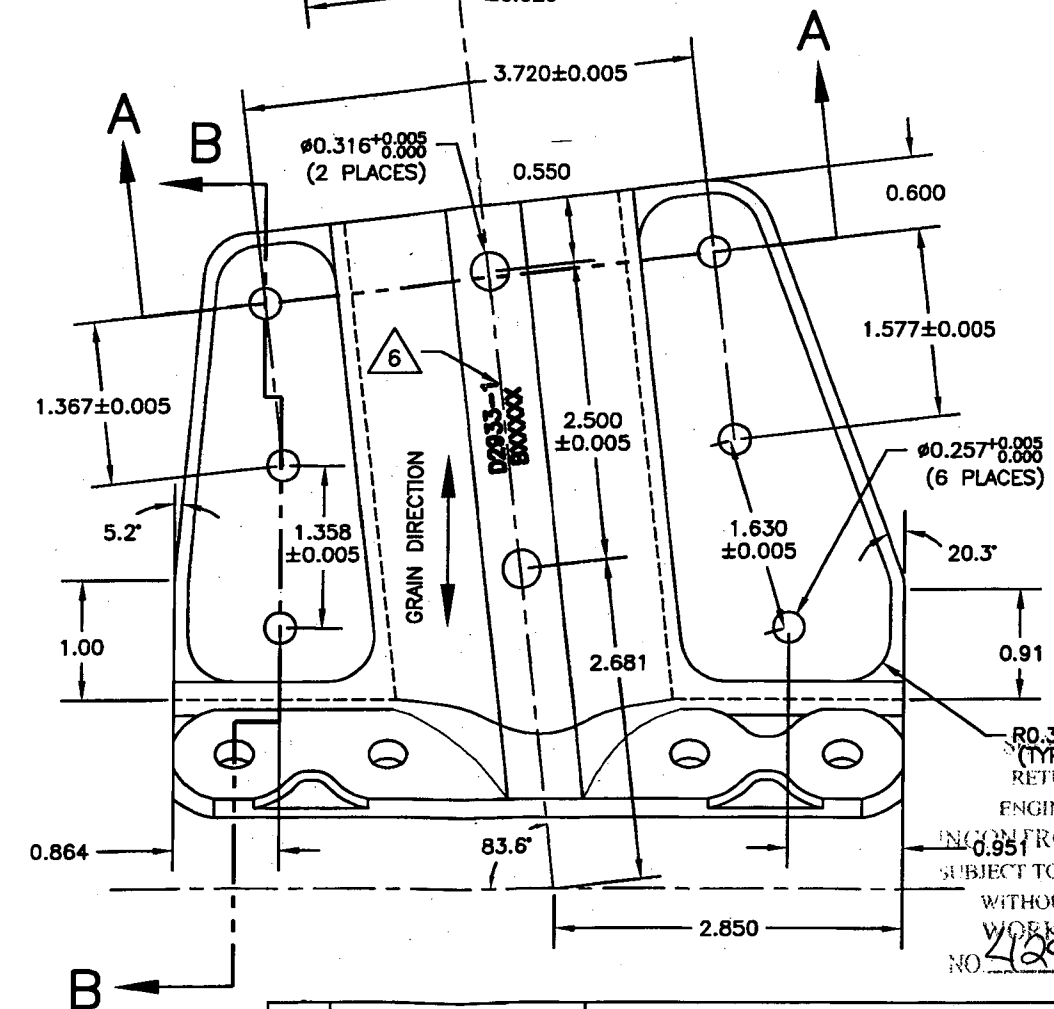
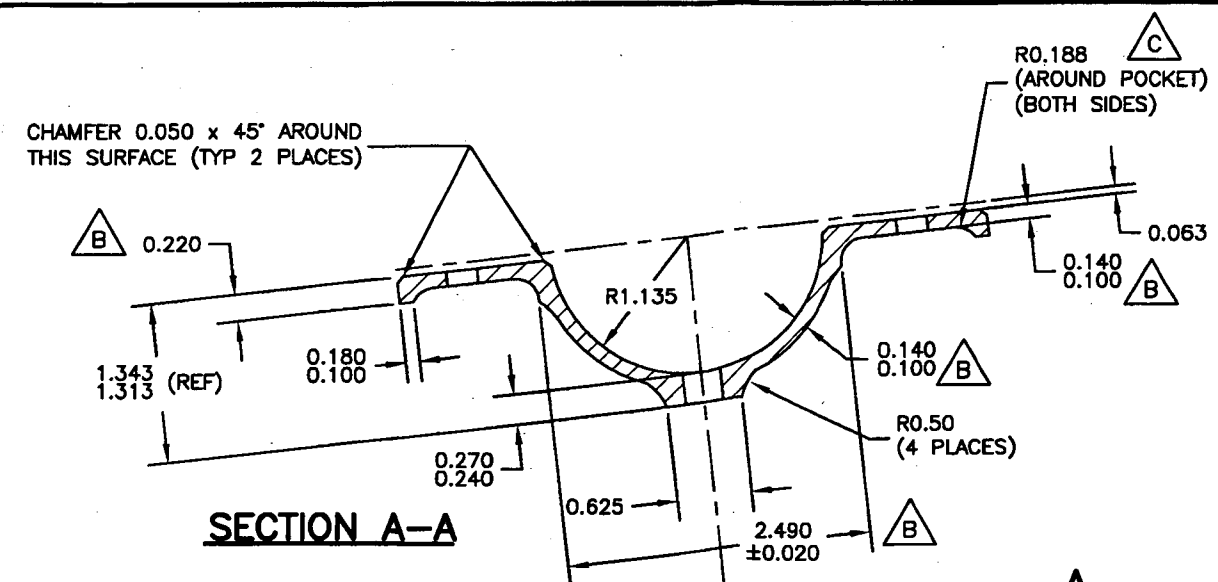
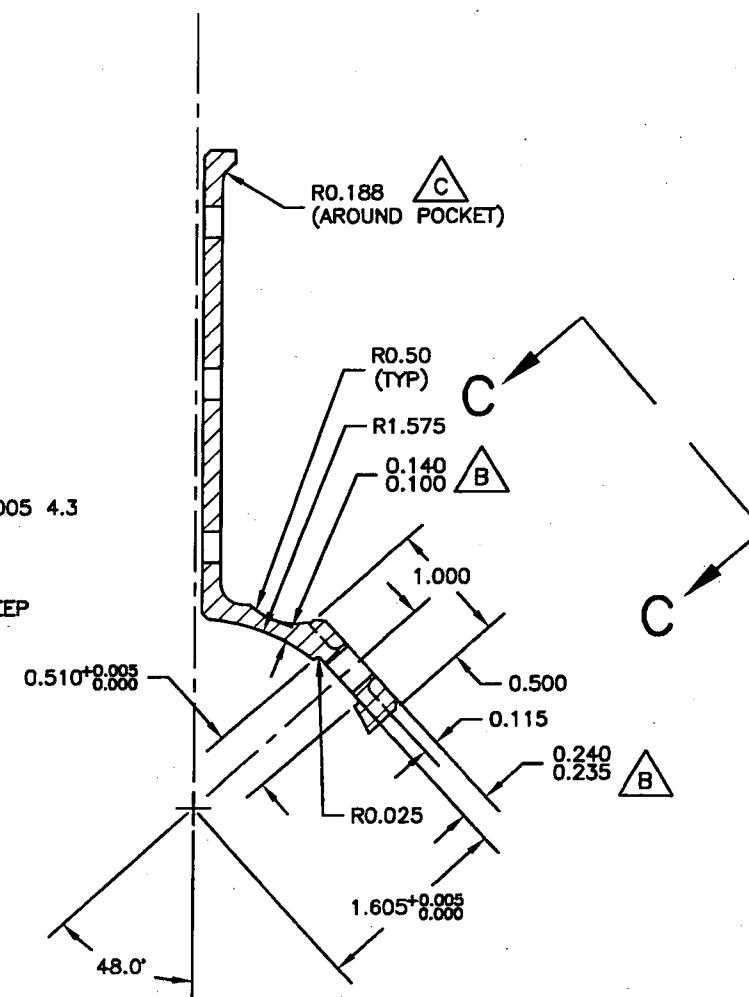
<b>Measured by:</b> MWF	<b>Date:</b> 08/11/09
<b>Audited by:</b> RF	<b>Date:</b> 08/11/11
<b>Prototype Approval:</b> N/A	<b>Date:</b> N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	



**D2933-1 LH SADDLE (SHOWN)**  
**D2933-2 RH SADDLE (OPPOSITE)**

- NOTES:**
- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)  
(MAKE FROM D6101-001 SADDLE BILLET, 7075)
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
  - 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
  - 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
  - 5) ALL DIMENSIONS ARE IN INCHES
  - 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP



COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 42928

C	06.11.09	R0.188 WAS R0.30 TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.10.29	NEW ISSUE
DESIGN	PH	DRAWN BY CB
CHECKED	PH	APPROVED
DATE	06.11.09	TITLE
		SADDLE INSIDE
		DART AEROSPACE USA, INC. BELLEVUE, WA
		DRAWING NO. D2933
		REV. C
		SHEET 1 OF 1
		SCALE
		2:3

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07-02-12